APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/017,850	11/30/2001	Daniel J. Aldrich	1708	9608

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EXAMINER
TRUONG, LECHI

ART UNIT	PAPER NUMBER
2194	

DATE MAILED: 04/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>04 January 2005</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-24</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) <u>19-24</u> is/are allowed.

6)☒ Claim(s) <u>1-16, 18</u> is/are rejected.

7)☒ Claim(s) <u>17</u> is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

    a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .

4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other:

DETAILED ACTION

1.   Claims 1-24 are presented for the examination.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

2.   Claims **1-9,14-16 and 18** are rejected under 35 U.S.C. 103(a) as being unpatentable over

Edwards et al (US. 6,353,819 B1).

3.   **As to claim 1**, Edwards teaches the invention substantially as claimed including: a first

architecture layer (the RAM Codegen Executor Component layer 204, col 5, ln 19/ Fig. 2),

transparent layer (the record file manager component layer 206, col 5, ln 5-7/ Fig. 2), a second

layer (the IO Random controller component layer 208, col 5, ln 20-25/ Fig. 2), the layer enabling

the first layer and the second layer to communicate directly without having to communicate via

the layer (col 2, ln 55-60/col 3, ln 13-17/col 5, ln 64-67/ col 9, ln 13-18). Edward does not

explicit teach architecture. However, Edwards teaches architecture (component, col 2, ln 52-55).

It would have been obvious to one of the ordinary skill in the art at the time the invention was

made to apply the teaching of Edwards because Edwards's component would improve the

efficiency of Edward's system by providing more efficiency method and system for improving

relational data access performance in retrieving row data.

4.   **As to claim 2,** Edwards teaches a first layer object (the RAM Codegen Executor

Component layer 204, col 5, ln 19/ Fig. 2), a transparent layer object (the record file manager

component layer 206, col 5, ln 5-19/ Fig. 2), a second layer (the IO Random controller

component layer 208, col 5, ln 20-25/ Fig. 2), the layer object configured to be hidden for

communication between the first layer object and the second layer object/ the communication

between each other by bypassing the layer (col 2, ln 55-60/col 3, ln 13-17/col 5, ln 9-19 and ln

54-67).

5.   **As to claim 3,** Edwards teaches a group comprising a control message, data (col 5, ln 44-

48).

6.   **As to claim 4,** Edwards teaches the first layer object is configured to transmit the

communication to the second layer object (col 5, ln 5-9).

7.   **As to claim 5,** Edwards teaches the second layer object is configured to transmit the

communication to the first layer object (col 8, ln 27-32).

8.   **As to claim 6,** Edwards teaches collapse the transparent layer object when the first layer

object and the second layer object relay the communication (col 2, ln 55-60/col 3, ln 13-17/col 5,

ln 9-19 and ln 54-67).

9.   **As to claim 7,** Edwards teaches a plurality of transparent layer objects (a multi-layered

relational database manager, col 2, ln 49-50).

10.   **As to claim 8,** Edward teaches the communication comprises data (col 5, ln 48-50).

11.   **As to claim 9,** Edward teaches configured to receive data, to transmit the data to the first

layer object, to receive other data from the first layer, and to render the other data (col 4, ln 65-67

to col 5, ln 1-4), user interface attachable to the first layer (col 1, ln 34 –38).

12.   **As to claim 14,** Edwards teaches an province configured (MFM component layer 206,

col 8, ln 30-32), an action province configured with logic to process an action and to generate at

least one query requesting data (col 5, ln 14-17/col 8, ln 53-56), query requesting data (col 5, ln

45-48), a yoke province (RAM Codegen Executor layer 204, col 5, ln 33), identify a database

with a database type to which the query corresponds (col 5, ln 42-44), initiate a connection with

the database to transmit the query to the database(col 5, ln 45-48), retrieve data in response to

the query(col 5, ln 47-50), transmit the data to the action province(col 8, ln 29-32), a witness

province(the Io Random Controller component layer 208, col 5, ln 20-21), the witness province

configured to identify the action occurring via an input/output interface (col 5, ln 20-23), notify

with the action at least one member of a group(col 8, ln 51-53), at least one layer configured to

enable communication with a surrounding layer without having to communicate via the layer(

col 2, ln 55-60/col 3, ln 13-17/col 5, ln 9-19 and ln 65-67).

13.   **As to claim 15,** it is an apparatus claim of claim 10; therefore, it is rejected for the same

reason as claim 10 above.

14.   **As to claim 16,** Edwards teaches apply logic to action and to direct transfers of the action

the query (col 8, ln 44-46), store the data (col 8, ln 53-56), initiate storage and retrieval of the

data to and from the database by identifying the database and generating the query for the

database (col 8, ln 27-32), format the query generated from the persistent layer to the database

format required by the database (col 5, ln 10-16).

15.   **As to claim 18,** Edwards teaches the witness yoke province comprises a nomadic layer

object configured to make a connection to the database and to pass the query to the database (col

5, ln 20-25/col 8, ln 44-46).

16.   Claims **10 and 11** are rejected under 35 U.S.C. 103(a) as being unpatentable over

Edwards et al (US. 6,353,819 B1) as applied to claim 1 above in view of Beer (US. Patent

5,793,368).

17.   **As to claim 10,** Edwards does not teach a selected user interface type dynamically

selectable and dynamically interchangeable from a plurality of user interface types. However,

Beer teaches a selected user interface type dynamically selectable and dynamically

interchangeable from a plurality of user interface types (dynamically switch between visual

styles, col 2, ln 10-15).

18.   It would have been obvious to one of the ordinary skill in the art at the time the invention

was made to combine the teaching of Edwards and Beer because Beer's dynamically switch

between visual styles would improve the efficiency of Edwards's system by reducing security

risks when loading applications from servers by avoiding use of machine code in defining a user

interface.

19.   **As to claim 11,** Edwards teaches a graphical user interface, a web enable interface, a

handles device interface, a voice simulate interface, a voice response interface, a voice activated

interface, a voice recognition interface, and an audio interface (col 1, ln 18 -25).

20.   Claims **12 and 13** are rejected under 35 U.S.C. 103(a) as being unpatentable over

Edwards et al (US. 6,353,819 B1) as applied to claim 1 above in view of Rick (CA Ship

Database-Management Suite For E-Commerce).

21.   As to claim 12, Edwards does not teaches a plurality of databases, each database having

a different database type. However, Rick teaches a plurality of databases, each database having a

different database type (the oracle database... Sybase databases, page 1, ln 22-23).

22.   It would have been obvious to one of the ordinary skill in the art at the time the invention

was made to combine the teaching of Edwards and Rick because Rick's a plurality of databases

and each database having a different database type would improve the efficiency of Edwards's

system by providing greater availability single instance accessing a single database.

23.   As to claim 13, Rick teaches a structured query language database, an Oracle database, a

DB2 database, and an XML-based database (page 1, ln 22 –23).

Allowable Subject Matter

24.   Claim **17** is objected to as being dependent upon a rejected base claim, but would be

allowable if rewritten in independent form including all of the limitations of the base claim and

any intervening claims.

25.   Claims **19-24** are allowed.

Response to the argument:

26.   Applicant amendment filed on 9/03/04 has been considered but they are not persuasive:

Applicant argued in substance that :

(1) " Ewards does not teach or suggest a transparent layer between the first architecture

and the second architecture layer"

(2) " Nothing in Edwards does not teach or suggest relaying the communication between

the first layer object and the second layer object bypassing the transparent layer object".

(3) " there is no teaching or sugestion in Edwards of the witness provine cofigured to

identify the action occuring via an input/output interface and to notify the action provine and/or

the witness province of the action"

27.   Examiner respectfully disagreed with Applicant's remarks:

As to the point (1), Edwards teaches the generated code is pased from the second layer

to the third layer for translating code-generated requests into I/O file read/writer request perfom

this I/O file read/write request(col 2, ln 5-20)/ the RFM layer receives the reads and writer

request from layer 204 and translatees them into IO fiel read and writer request. The IO Random

controller layer 208 receives the request form layer 204(col 5, ln 16-21).

As to the point (2), Edwards teaches the RFM componet layer perform the required

record file processing. Bypassing or eliminating this layer from the row retrieval process results

in a substantial increase in performace (col 3, ln 13-17/ col 5, ln 64-67/ col 9, ln 13-18).

As to the point (3), Ewards teaches the IO Random Controller component layer 208

receives the requests from layer 206 and performs the relation file processing of translating the

code-generated requests into I/O read/write request (col 5, ln 20-25). Edwards teaches " notify

with the action at least one member of a group comprising the action province and the yoke

interface" in the claim (IO componet layer 208 sets pointer value to the page (CI) in the IO XPT

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structure and returns to the RFM component layer 206, col 8, ln 51-54). To notify the witness province of the action was not in the claim.

18. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LeChi Truong whose telephone number is (571) 272 3767. The examiner can normally be reached on 8 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on 703-305-9678. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR of Public PAIP. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIP

system, contact the Electronic Business Center (EBC) at 866-217-9197(toll-free).

LeChi Truong

April 14, 2005

SUE LAO
PRIMARY EXAMINER